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Ruffa

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(54) **ACOUSTIC ARRAY DEPLOYMENT SYSTEM
AND METHOD**

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(58) **Field of Search** 367/173, 153,
367/149, 131

(56) **References Cited**

U.S. PATENT DOCUMENTS

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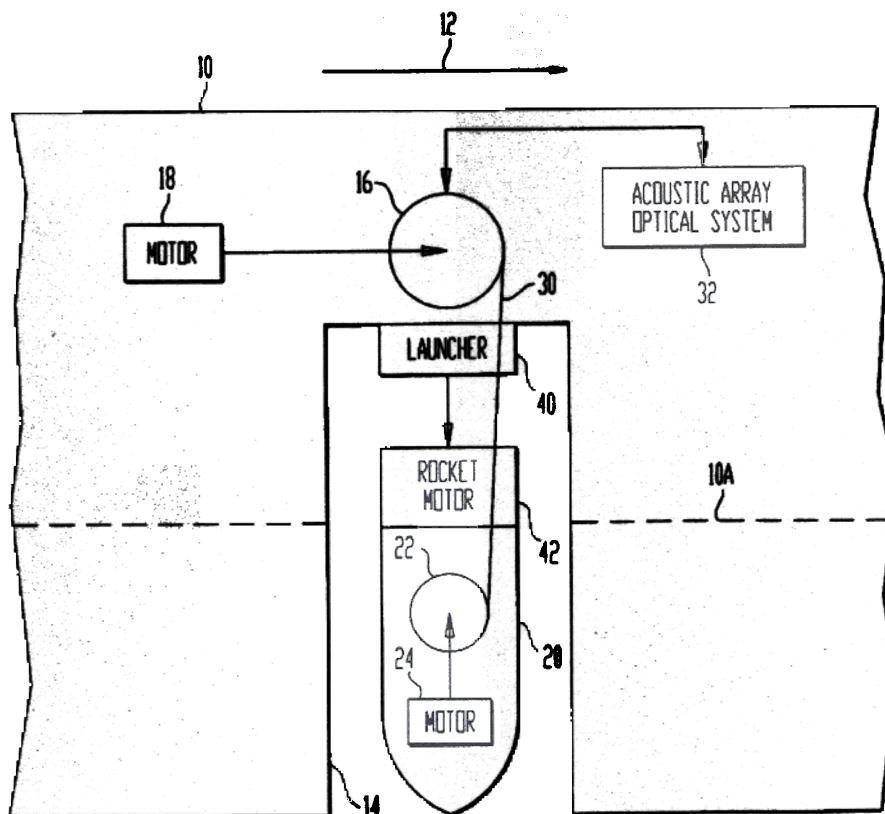
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(57) **ABSTRACT**

An acoustic array deployment system and a method are provided. An optical fiber acoustic array has a first end coupled to a projectile housed onboard an underwater vehicle. A second end of the array is coupled to the underwater vehicle. The acoustic array is stored on a spool while the projectile is housed onboard the underwater vehicle. The projectile is launched from onboard the underwater vehicle in a gravitationally downward direction that is not aligned with the underwater vehicle's direction of travel. As a result, the acoustic array is paid out from the spool as the projectile is launched and then sinks. By establishing the line array's broadside beam in a direction that is away from the vehicle and approximately perpendicular to the vehicle's direction of travel, the relative angular difference between the underwater vehicle and target can be used to guide the vehicle towards the target.

19 Claims, 1 Drawing Sheet



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